The Effect of Health Promotion Media on Breastfeeding Mothers’ Attitude about Exclusive Breastfeeding in Bone Regency, South Sulawesi

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Abstract

BACKGROUND: Breast milk (ASI) is an essential food for babies aged 0–6 months. However, many mothers do not provide breast milk exclusively to their babies due to many reasons, including busy work. Furthermore, another reason of them to not provide exclusive breast milk is because of the lack of information obtained during pregnancy and breastfeeding period, leading to the lack of understanding and affecting the formation of positive attitudes of the mothers toward the importance of exclusive breastfeeding.

AIM: This study aims to analyze the effect of health promotion media on the mothers’ breastfeeding attitude about exclusive breastfeeding in Bone Regency, South Sulawesi.

METHODS: This research was conducted by applying a quantitative quasi-experimental design with two groups of pre-test and post-test. The population and samples involved are 70 breastfeeding mothers who had children aged 0–6 months old and living in the working area of the Koppe Public Health Center. In this case, they were divided into two groups with a ratio of 1:1, in which 35 breastfeeding mothers were in the flip chart group and the other 35 mothers were in the education control card group.

RESULTS: Based on the research that has been done, it was revealed that there was an effect of knowledge before and after health education, intervention was provided in the forms of educational control card media with = 0.000 (p < 0.05). The difference in the mean value between the flip chart and after health education, intervention was provided in the forms of educational control card media with = 0.000 (p < 0.05). The difference in the mean value between the flip chart and after health education, intervention was provided in the forms of educational control card media with = 0.000 (p < 0.05).

CONCLUSIONS: This study concluded that there was no difference in attitude between the flipchart group and the education control card group after being given the intervention.

Introduction

Breast milk is an essential food for babies aged 0–6 months old, because it contains antibodies for the baby’s immunity and nutrients which are required for the babies’ brain, motor and sensory development. However, there are actually many babies who do not get exclusive breastfeeding due to many reasons, particularly mothers who are busy working. Furthermore, the lack of information obtained by the mothers during their pregnancy and breastfeeding period also causes the lack of understanding and the formation of positive attitudes of the mothers toward the importance of exclusive breastfeeding [1]. In this case, various studies have been conducted and revealed that even though mothers have positive attitude toward breastfeeding, the exclusive breastfeeding practice was found lower than expected [2], [3].

There is a constant relationship between knowledge and the formation of someone’s attitude regarding an object, including exclusive breastfeeding. The presence of personal experiences, important people references, social norms, media, and internal factors from a mother such as emotional aspect will affect the formation of mothers’ attitudes. In this case, attitudes can change from negative to positive if the information obtained is accompanied by social-environmental support. A significant relationship between attitude and social-environmental support, in addition to the absence of exposure to formula milk advertisement, can affect the success of exclusive breastfeeding. Such event occurs in Bone Regency. Based on the initial data obtained, it was discovered that there were still many mothers who gave formula milk compared to exclusive breastfeeding [4]. In this case, to create a positive attitude regarding exclusive breastfeeding, a mother needs reasoning so that continuous education through health promotion can be useful and support the attitude of exclusive breastfeeding. The understanding obtained from the health promotion and social support including health workers is one of the determining factors for successful breastfeeding because a mother will have the confidence provide breast milk for her baby [5], [6].
Health promotion can change a mothers' attitude so that she adopts a positive attitude of a breastfeeding mother. Education for changes in attitude formation about exclusive breastfeeding requires media as a tool to convey messages so that they are easily understood by the target, especially those who come from different educational backgrounds. The effectiveness of media in giving health messages will lead to changes of the desired attitude because media can improve memory, especially if it is done regularly and adjusted to the target. Furthermore, the right educational media will make it easier for the information provided to be received and remembered by the target to form a positive attitude about exclusive breastfeeding. In this case, research has been conducted on education through flipcharts and educational control cards. These two media are expected to increase knowledge and understanding of the formation of positive attitudes for breastfeeding mothers regarding the importance of exclusive breastfeeding. In this case, research has been conducted on education through flipcharts and pocketbooks, which is proven to cause changes in the attitudes of pregnant women toward the success of early breastfeeding initiation. This occurred because the information from the two media can be read repeatedly so that it has an effect on increasing retention of attitudes about exclusive breastfeeding [7]. In this case, many educational media can be utilized to carry out health promotion, including flipcharts and educational control cards. These two media are expected to increase knowledge and understanding of the formation of positive attitudes for breastfeeding mothers [8]. Similarly to the educational control card on exclusive breastfeeding, which is in addition to being a medium of controlling or evaluating mothers' visits to healthcare services, it also contains easily understood information from various different educations because they are designed attractively. Therefore, its utilization is expected not only to increase knowledge but also to increase the provision of breast milk due to the parents' awareness, particularly from the mother. In this case, a study carried out by Fatmasari et al. revealed that education using control books is one of the factors that affect the success of early breastfeeding initiation [8].

It is expected that the distribution of information about the importance of exclusive breastfeeding through flipcharts during every mother's visit can be a media conveying the appropriate message in creating positive attitudes. Interventions conducted using flipcharts can increase mothers' knowledge, attitudes, and practices regarding the appropriate age for breastfeeding [8]. Similarly to the educational control card on exclusive breastfeeding, which is in addition to being a medium of controlling or evaluating mothers' visits to healthcare services, it also contains easily understood information from various different educations because they are designed attractively. Therefore, its utilization is expected not only to increase knowledge but also to increase the provision of breast milk due to the parents' awareness, particularly from the mother. In this case, a study carried out by Fatmasari et al. revealed that education using control books is one of the factors that affect the success of early breastfeeding initiation [8].

Health promotion using flipcharts and educational control cards is important to be conducted to increase the awareness of exclusive breastfeeding, since there are still many areas that have not reached the target, including Bone Regency, South Sulawesi. Based on the initial data obtained, it was revealed that babies who received exclusive breastfeeding in 2019 were 68.32% of the 90% target. The reason of such low coverage of exclusive breastfeeding is that there are still many mothers who provide formula milk (breast milk supplement) and complementary foods early in the 3rd and 4th months of the child's age. Such behavior is not only due to busywork but also because of the lack of information and education about exclusive breastfeeding for mothers during pregnancy until delivery as well as the use of conventional methods such as counseling without visualization or pictures.

Therefore, the current research was conducted to analyze the effect of health promotion media on the mothers' breastfeeding attitude about exclusive breastfeeding in Bone Regency, South Sulawesi.

### Methods

This research was conducted in July 2020, using a quantitative method through a quasi-experimental design of two groups of pre-test and post-test. The population and sample involved were 70 breastfeeding mothers who had children aged 0–6 months old and living in the working area of Koppe Public Health Center. In this case, these samples were divided into two groups with a ratio of 1:1: Thirty-five breastfeeding mothers in the flipchart group and 35 breastfeeding mothers in the education control card intervention group. Furthermore, the data collection was performed using a questionnaire related to the mother's attitude toward exclusive breastfeeding containing 20-question items using a Likert scale. The data obtained were then analyzed using univariate and bivariate statistical test methods and processed using
the Chi-square test in the SPSS (Software Product and Service Solution) 16.0 version program.

In this case, the research was conducted through several stages of (1) the preparation of implementation; preparing the activity material and instruments, (2) implementation stage; filling out the pre-test, performing the intervention using flipchart media and education control cards in each group and then performing the post-test in 1 week after the intervention was given; and (3) evaluation stage; finding out the attitude changes of the breastfeeding mothers before and after the intervention was provided.

Results

Respondents’ characteristics

Based on Table 1 and 2, it can be seen that there was changes of attitude between before and after the education was given. In the case of flipchart, the positive attitude before the intervention was 77.1%, while after the intervention, it increased to 94.3%. Meanwhile, in the case of the control card, it obtained 82.9%, which increased to 97.1% after given the intervention regarding the exclusive breast milk.

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>77.1</td>
<td>94.3</td>
</tr>
<tr>
<td>Negative</td>
<td>22.9</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2: Pre-test and post-test of flipchart and control card media

Base on Table 3, in this research, the normality test was carried out using Kolmogorov–Smirnov test. In this case, the breastfeeding mothers’ attitude about exclusive breastfeeding in both flipchart and education control card groups have met the requirements for normality tests, both pre-test and post-test. It can be seen that the significance value or p-value is above 0.05, indicating that the data are normally distributed.

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flipchart</td>
<td>0.916</td>
<td>0.551</td>
</tr>
<tr>
<td>Control card</td>
<td>0.603</td>
<td>0.806</td>
</tr>
</tbody>
</table>

Table 3: Data normality test

Based on Table 4, it shows that the mean value of the breastfeeding mothers’ attitude about exclusive breastfeeding before the intervention using flipchart media is 69.39, while after the intervention is 75.63. Meanwhile, in the case of the intervention using control card media, before the intervention was given, the value is 73.08, while after the intervention, the value is 78.96. The use of the two media showed an increase in the attitude value between before and after the intervention as well as the results of the paired T-test which obtained significance value (p value) of 0.000 (p < 0.05). Therefore, it indicates that both flipchart media and control cards affect the breastfeeding mother’s attitude about exclusive breastfeeding.

Based on Table 5, from 35 samples from each sample group, there was a difference in the mean value of each treatment group. In the case of the flipchart group, the mean and standard deviation before (pre-test) the intervention was given is 69.39 with an SD = 8,888, while after the intervention (post-test), it became 75.63 with an SD = 8,623. Meanwhile, for the control card group, the mean and standard deviation before (pre-test) intervention was given is 73.06 with SD = 8,908, while after the intervention (post-test) is 78.98 with SD = 7,339, thus it is more likely to increase.

Table 5: Results of independent t-test on the difference of breastfeeding mothers’ attitude regarding exclusive breast milk

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flipchart</td>
<td>69.39</td>
<td>8.888</td>
<td>0.085</td>
</tr>
<tr>
<td>Control card</td>
<td>73.06</td>
<td>7.339</td>
<td></td>
</tr>
</tbody>
</table>

Discussion

Notoatmodjo stated that health promotion is an improvement of health and an effort to market, distribute, introduce, or sell health so that people want to behave in a healthy manner [10]. Health promotion is carried out with the purpose of affecting the targets’ knowledge, which is certainly expected to change their attitudes and behavior regarding health. To obtain maximum results in conducting health promotion, the role of the media is very important to make it easily accepted and remembered by the target and for better understanding. In this case, many media have the
ability to convey messages. However, the media utilized must be in accordance with the target conditions since the presence of educational media makes it easier to provide the information because they involve sensory processes. Both flipcharts and educational control cards are media that are able to increase knowledge and change attitudes, especially when the targets have different educational backgrounds. The role of the two media is very effective because interesting pictures accompany it so that it is easy to change the attitudes, especially regarding exclusive breastfeeding. Good communication media accompanied by additional media will be easily accepted and remembered by the mother so that it can encourage them to know and obtain a good understanding [8].

Based on the results obtained from the present study, it was shown that on the average, the breastfeeding mothers who had a positive attitude toward exclusive breastfeeding before the intervention was given are 27 mothers (77.1%) and only eight mothers who had a negative attitude. Mothers who have a positive attitude are those who have had more than 2 children and have had previous breastfeeding experiences. In addition, the breastfeeding mothers’ response is very positive toward exclusive breastfeeding, in which they agreed on the benefits of breastfeeding for babies, mothers, and families, as well as the importance of providing exclusive breastfeeding as often as possible without any particular. Furthermore, eight breastfeeding mothers gave a negative response on exclusive breastfeeding due to busy work outside the home and their lack of knowledge of exclusive breastfeeding, which affected the mother’s attitude about exclusive breastfeeding. Occupational factors are one of the barriers to exclusive breastfeeding since it gives insufficient time to breastfeed and store breast milk [11], [12]. On average, breastfeeding mothers agreed that formula milk is good enough in replacing exclusive breastfeeding and mothers can give their babies complementary foods before they are 6 months old. In this case, it was also revealed that these breastfeeding mothers obtained lack of socialization regarding the difference between exclusive breastfeeding and formula milk, and when breast milk production was insufficient, they preferred to give formula milk as a substitute for breast milk because they thought that formula milk feeding is more practical.

In this research, after intervention was given in the forms of the use of flipchart, there was an increase in the mother’s attitude toward exclusive breastfeeding, in which there were 33 mothers (94.35) who had a positive attitude and only 2 (5.67) mothers had a negative attitude. In addition, there was also an increase in attitudes, based on the total value of attitudes before and after the intervention. At this stage, the attitude at the responding stage, which is marked from the mother’s enthusiasm in responding to the material to valuing, meaning that the mother is able to remind other mothers to listen and pay attention to the contents of the flipchart media.

In addition, based on the results of the study, each sample group had an average difference in the attitudes of each treatment group. For the flipchart group, the mean and standard deviation before (pre-test) the intervention was given is 69.39 with an SD = 8,888, while after the intervention (post-test) was given is 75.63 with an SD = 8,623. Meanwhile, for the control card group, the mean and standard deviation before the intervention (pre-test) was given is 73.06 with an SD = 8,908, while after the intervention (post-test), it was 78.98 with an SD = 7,339, and thus, in this case, there was an increase tendency.

The educational materials provided to the control card group are the same as the content of the flipchart media. The contents are related to IMD (early breastfeeding initiation), how to do IMD, the benefits of IMD for mothers and babies, the definition of exclusive breastfeeding, the benefits of breastfeeding for mothers, babies, and families, types of breastfeeding, limits for breastfeeding, and types of complementary feeding. During the stage of providing intervention to the control card group, the researcher first asked about the problems experienced by mothers in providing exclusive breastfeeding followed by providing education regarding the problem. In this case, the material provided did not come out of the context of the main material to be given.

The results of this study also showed that some breastfeeding mothers did not experience an increase in their knowledge and attitudes even after obtaining intervention. This is caused by other factors that affect the education such as not focusing on the intervention because there were mothers who brought their babies during the activity. Therefore, the success of increasing knowledge and attitudes was not achieved by 100%. In this case, the diverted attention that occurred during the intervention causes stimulus reception to be not optimal even though the materials and media used are attractive. In addition to these factors, there are also environmental conditions which are not supportive so that the formation of attitude cannot be maximized.

In the case of the intervention using educational control card media, on average, there were 29 mothers who had a positive attitude toward exclusive breastfeeding before the intervention was given (82.9%), while the remaining 6 mothers (17.1) gave a negative response. After the intervention was provided, there was an increase in positive attitudes of breastfeeding mothers about exclusive breastfeeding, of which there were 34 mothers (97.1%) who gave positive attitudes. Such changes cannot be separated from the increase in mothers’ knowledge after the education using control card media was given. Along with the increasing knowledge of breastfeeding mothers about exclusive breastfeeding, they also began to receive stimulation and respond to matters related to exclusive
breastfeeding and began to realize the importance of exclusive breastfeeding until the age of 6 months old without any additional food or fluids. However, there are still 6 breastfeeding mothers (2.9%) who are persistent even after the intervention was given, even though the category of mother’s attitude shows a positive attitude.

The mean value for mothers’ attitudes about exclusive breastfeeding before education using a control card is 73.06, while after the education, the mean value is 78.98. This indicates that there was an increase in the value of mothers’ attitudes before and after education. Furthermore, the results of the paired t-test obtained a significance value of 0.000 (p < 0.05). Therefore, it can be concluded that there was a difference between the pre-test and post-test values regarding the breastfeeding mothers’ attitudes about exclusive breastfeeding. In this case, it proves that educational control cards affected the breastfeeding mothers’ attitudes about exclusive breastfeeding. At this stage, the change in the attitude of breastfeeding mothers after education using a control card was carried out in the receiving and responding stages.

Based on the statistical tests using independent t-test during the pre-test, the probability value obtained is p = 0.089 which is above α = 0.05. Thus, it indicates that there was no difference in attitude between the flipchart and control card groups before the intervention was given. Meanwhile, the probability value after the intervention was given obtained p = 0.085 which is above α = 0.05. Based on this result, it indicates that there was no difference in attitude between the flipchart group and the education control card after the intervention was given.

The advantage of flipchart media is in the case of providing detailed explanations about exclusive breastfeeding and clear images that can be seen by the target, thus making the information easy to understand. The sheets with undensed pictures with language that is easy to understand can change the knowledge and attitudes when the interventions regarding exclusive breastfeeding were given, especially if they are always repeated. Even though it was carried out during a pandemic, the provision of education and post-test was carried out at the home of one of the cadres due to the limitation of only five people in a small group for each education provision. This actually made the breastfeeding mothers more focused and gave a lot of space to ask questions about material that was not understood. Sibel claimed that breastfeeding education and home visits as well as mentoring were effective to promote and implement breastfeeding. Related to this, the results of this study indicate that interactive education can increase mothers’ knowledge, management of breastfeeding practices, breastfeeding self-efficacy, and babies’ growth [13].

The provision of health promotion through control card media makes the mothers easier to absorb the information given since it was carried out in two directions. In this case, the mothers who have questions about matters that are not understood can obtain explanation orderly. Education through control cards can be implemented effectively because of the comfortable and intense cooperation and communication between the information provider by the researcher and the mother. Although there are nursing mothers with minimal educational backgrounds and housewives, the attitude of respect and the simple language used is very easy for breastfeeding mothers to understand. In addition, the timing of providing education is adjusted to the free time of breastfeeding mothers so as to create a comfortable atmosphere and increase the success of information absorption about exclusive breastfeeding. The open acceptance when giving education was responded positively by the breastfeeding mothers by being good listeners and there was reciprocity in the form of responses to the material provided. The information obtained and often repeated on the control card media is able to increase knowledge which then affects the breastfeeding mothers’ attitude regarding exclusive breastfeeding. In this case, according to Notoatmodjo, frequent and repeated provision of information or knowledge can increase a person’s knowledge retention [10], [14].

Based on the current research, it was revealed that both media in the form of flipcharts and educational control cards were able to increase the mothers’ knowledge and attitudes. In the case of the flipchart group, the mean score obtained after the intervention (post-test) is 58.14 with SD = 12.549. Meanwhile, in the case of the control card group, the mean and standard deviation after (post-test) the intervention was given is 67.71 with SD = 12.623. Thus, it is more likely to increase. For the flipchart group, the mean value obtained after the intervention (post-test) was given is 75.63 with an SD = 8623, while for the control card group, the mean and standard deviation after the intervention (post-test) was given is 78.98 with an SD = 7339, thus there was an increasing tendency.

Furthermore, based on the statistical test results obtained from the independent t-test, the probability value after the intervention was given is p = 0.002 which is above α = 0.05. Therefore, it can be concluded that there was a difference in knowledge between the flipchart group and the educational control card group after the intervention was given. The difference in the mean value between the flipchart media group and the educational control card is 9.57. Meanwhile, the attitude probability value after the intervention was given is p = 0.085 which is above α = 0.05. Thus, it indicates that there was no difference in attitude between the flipchart group and the educational control card group after the intervention was given. However, the difference is shown from the difference in the mean value between the flipchart group and the education control card, which is 3.3. Eventually, it can be summed up that the control card media seems to be more effective in increasing
the mothers’ knowledge and attitudes about exclusive breastfeeding.

Conclusions

The current research revealed that there were effects in the attitude between before and after the intervention using flipchart media which was given, with $p = 0.000$ ($p < 0.05$). In addition, there is also an effect of knowledge before and after the intervention in the forms of educational control card media with $p = 0.000$ ($p < 0.05$). The difference in the mean value between the flipchart media and the education control card groups is 9.57, while the attitude probability value after the intervention is $p = 0.085$ which is above $\alpha = 0.05$. Therefore, this shows that there was no difference in attitudes between the flipchart group and the education control card after the intervention group was given intervention. However, the difference was shown from the difference in the mean value between the flipchart group and the education control card, which is 3.3.

References